

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for securing ~~facilitating securement of~~ a vascular graft within a blood vessel, ~~which the apparatus comprises~~ comprising:

a shaft dimensioned for passage within ~~a~~ the blood vessel and having an expansion member, said expansion member movable between a contracted condition and an expanded condition; and

a fastener array comprising a plurality of fasteners ~~at least one fastener~~ disposed about a peripheral portion of said expansion member, said plurality of fasteners ~~one fastener~~ being deployable into a wall of said blood vessel upon movement of said expansion member to said expanded condition thereof, to ~~thereby engage~~ and ~~the vascular graft to secure the vascular graft to~~ a ~~the~~ wall of the blood vessel,

wherein, when the expansion member is in the contracted condition, fasteners of the fastener array are arranged in overlapping relation.

2. (Currently Amended) The apparatus according to claim 1, wherein each fastener of the fastener array ~~includes a plurality of fasteners~~ has a telescopic base.

3. (Currently Amended) The apparatus according to claim 1,2 wherein ~~the fasteners~~ each fastener of the fastener array ~~are~~ is operatively connected to ~~each~~ another fastener.

4. (Currently Amended) The apparatus according to claim 1,2 wherein said fasteners of said fastener array are releasably secured to said peripheral portion of said expansion member.

5. (Original) The apparatus according to claim 4 wherein the fasteners are releasably adhered to said peripheral portion of said expansion member with an adhesive.

6. (Currently Amended) The apparatus according to claim 2 wherein said fastener array defines a substantially annular arrangement whereby said fasteners are arranged about a periphery of said expansion member.

7. (Original) The apparatus according to claim 1 wherein said fasteners of said fastener array are connected to a biocompatible member, said biocompatible member being mounted about said peripheral portion of said expansion member.

8. (Original) The apparatus according to claim 7 wherein the biocompatible member is a biocompatible tape.

9. (Currently Amended) The apparatus according to claim 2, wherein the telescopic base of the fasteners permits telescoping movement while maintaining connection between adjacent fasteners of said fastener array when securing the graft ~~are arranged in overlapping relation.~~

10. (Currently Amended) The apparatus according to claim ~~1~~9 wherein each ~~said~~ fastener of said fastener array is a surgical staple having a base and penetrating legs extending from opposed ends of said base.

11. (Original) The apparatus according to claim 10 wherein said legs of each said staple define a length sufficient to penetrate through the vascular graft and lodge within the wall of the blood vessel without penetrating completely through the wall of the blood vessel.

12. (Original) The apparatus according to claim 1 wherein said expansion member is an inflatable balloon member.

13. (Currently Amended) The apparatus according to claim ~~12~~1, wherein the expansion member is an umbrella mechanism ~~further including inflation means for inflating said balloon member to move said balloon member to said expanded condition.~~

14. (Currently Amended) The apparatus according claim ~~1~~10, wherein progressive balloon inflation provides sequential deployment of the fasteners ~~said expansion member includes a stent.~~

15. (Currently Amended) An apparatus for ~~facilitating securement of~~ securing a vascular graft within a blood vessel, ~~which the apparatus comprises~~ comprising:

an elongated shaft having proximal and distal ends, and defining a longitudinal axis, said elongated shaft being dimensioned for passage within ~~a~~ the blood vessel;

an expansion member supported at said distal end of said elongated shaft, said expansion member movable between ~~adapted to expand from a substantially contracted condition to a substantially and expanded condition~~ conditions; and

a surgical staple array including a plurality of surgical staples arranged about a peripheral portion of said expansion member, ~~a plurality of at least first and second adjacent surgical staples~~ being arranged in partial overlapping relation, said staples of said staple array being deployable into a wall of ~~a~~ the blood vessel upon expansion of said expansion member ~~to said expanded condition thereof~~;

wherein, when said expansion member and said surgical ~~clip~~ staple array are positioned within ~~the a substantially tubular graft positioned~~ disposed within the blood vessel, said expansion member ~~is expanded~~ expands to ~~said expanded condition to deploy said surgical clips~~ staples, thereby ~~causing engagement of engaging~~ engaging said surgical ~~clips~~ staples with the vascular graft and the blood vessel to secure the vascular graft within the blood vessel.

16. (Currently Amended) The apparatus according to claim 15, wherein expansion of the expansion member arranges said surgical staples of said staple array ~~are arranged to define an annular configuration~~.

17. (Currently Amended) The apparatus according to claim 16 wherein ~~adjacent the plurality of surgical staples are, when the expansion member is in the contracted condition, positioned in a superposed, compacted relation wherein adjacent ends of~~ of said the surgical staples ~~staple array are disposed in at least partial overlapping relation~~ overlap.

18. (Currently Amended) A method for securing a vascular graft within a blood vessel, the method comprising the steps of:

accessing ~~at~~the blood vessel;
positioning ~~a~~the vascular graft at a predetermined location within the blood vessel;
introducing ~~a fastener array within the blood vessel~~ and moving ~~said a~~ fastener array within the blood vessel ~~to a position at least partially disposed within the vascular graft~~, said fastener array including a plurality of surgical fasteners arranged about a longitudinal axis of said fastener array, said surgical fasteners having penetrating portions dimensioned to penetrate the vascular graft; and
deploying said surgical fasteners of said fastener array radially outwardly relative to said longitudinal axis,
whereby said penetrating portions of said surgical fasteners penetrate the vascular graft and engage ~~a wall of the blood vessel without completely penetrating through the wall of the blood vessel~~, to thereby secure the vascular graft to the blood vessel ~~wall~~.

19. (Currently Amended) The method according to claim 18, wherein moving the fastener array within the blood vessel position disposes the fastener array at least partially within the vascular graft ~~is a substantially tubular vascular graft defining an outer peripheral graft wall~~.

20. (Currently Amended) The method according to claim 19, wherein said surgical fasteners of said fastener array are arranged with respect to each other to define a compacted substantially annular configuration whereby, upon ~~said step of deploying~~, said surgical fasteners expand and secure the substantially tubular graft to the blood vessel substantially along ~~the an~~ outer peripheral graft wall.

21. (Currently Amended) The method according to claim 19, wherein ends of including a catheter having a catheter shaft, said fasteners are overlapped prior to deploying of said fastener array being to provide a compacted fastener arrangements ~~supported adjacent a distal end of said catheter~~, and wherein said step of introducing includes advancing said catheter within the blood vessel ~~wall to position said fastener array at least partially within the vascular graft~~.

22. (Currently Amended) The method according to claim 21, wherein said ~~catheter~~

~~includes an expansion member disposed adjacent said distal end of said catheter shaft, said surgical fasteners are sequentially deployed arranged about a peripheral surface of said expansion member and wherein said step of deploying includes expanding said by an expansion member to cause causing said surgical fastener to move radially outwardly into engagement with through the vascular graft and into the wall of the blood vessel.~~